Contents of Volume 6

No. 1

Review

Microbodies in fungi: a review 1
D.B. Carson and J.J. Cooney (U.S.A., Ireland)

Original Papers

Transfer of plasmids and chromosomal genes amongst subspecies of *Bacillus thuringiensis* 19
C. Wiwat, W. Panbangred and A. Bhumiratana (Thailand)

The fermentation of xylose: studies by carbon-13 nuclear magnetic resonance spectroscopy 29
K.B. Taylor, M.J. Beck, D.H. Huang and T.T. Sakai (U.S.A.)

Ammonium effects on streptonigrin biosynthesis in *Streptomyces flocculus* 43
K.K. Wallace, G.F. Payne and M.K. Speedie (U.S.A.)

Bioleaching of cobalt from smelter wastes by *Thiobacillus ferrooxidans* 49
G.J. Olson, C.K. Sakai, E.J. Parks and F.E. Brinckman (U.S.A.)

Colonization and degradation of oxidized bituminous and lignite coals by fungi 53
D.L. Stewart, B.L. Thomas, R.M. Bean and J.K. Fredrickson (U.S.A.)

Applications of thin layer chromatography, high performance liquid chromatography and mass spectrometry in the fermentation and isolation of the antibiotic nybomycin 61
J.A. Pope Jr., R.A. Nelson, C.P. Schaffner, R.T. Rosen and R.C. Pandey (U.S.A.)

Evaluation of infrared spectroscopy as a bacterial identification method 71
A.H. Lipkus, K.K. Chittur, S.J. Vesper, J.B. Robinson and G.E. Pierce (U.S.A.)

No. 2

Review

Copper toxicity and uptake in microorganisms 77
J.T. Trevors and C.M. Cotter (Canada)

Original Papers

Fermentation of *Candida utilis* for uricase production 85
V. Adámek, M. Suchová, K. Demnerová, B. Králová, I. Fořt and P. Morava (Czechoslovakia)

Regulation of biosynthesis of bacilysin by *Bacillus subtilis* 91
G. Ozcengiz, N.G. Alaeddinoglu and A.L. Demain (Turkey, U.S.A.)

Microbial physiology of sidechain degradation of sterols 101
A. Szentirmai (Hungary)

Purification and partial characterization of a D(−)-lactate dehydrogenase from *Desulfovibrio desulfuricans* (ATCC 7757) 117
M.H. Czechowski and H.W. Rossmoore (U.S.A.)

Accumulation of cadmium by immobilized *Zoogloea ramigera* 115 123
S.P. Kuhn and R.M. Pfister (U.S.A.)

The use of bacterial alginates to prepare biocontrol formulations 129
A.J. DeLucca II, W.J. Connick Jr., D.R. Fravel, J.A. Lewis and J.M. Bland (U.S.A.)

CP-82,996, a novel diglycoside polyether antibiotic related to monensin and produced by *Actinomadura* sp. 135
J.P. Dirlam, A.M. Belton, J. Bordner, W.P. Cullen, L.H. Huang, Y. Kojima, H. Maeda, S. Nishiyama, J.R. Oscarson, A.P. Ricketts, T. Sakakibara, J. Tone and M. Yamada (U.S.A., Japan)

Effect of selective media on loss of congo red binding in *Shigella flexneri* 143
J.L. Smith, B.J. Dell and S. Bhaduri (U.S.A.)

Characterization of sugar transport in 2-deoxy-D-glucose resistant mutants of yeast 149
S. Novak, T. D'Amore, I. Russell and G.G. Stewart (Canada)

No. 3

Editorial v

Original Papers

Fermentation of hardwood hemicellulose hydrolysate by *Pachysolen tannophilus*, *Candida shehatae* and *Pichia stipitis* 157
P. Perego, A. Converti, E. Palazzi, M. Del Borghi and G. Ferraiolo (Italy)

Penicillin production by glucose-derepressed mutants of *Penicillium chrysogenum* 165
L.T. Chang, E.L. McGrory and R.P. Elander (U.S.A.)

Extracellular mannanases and galactanases from selected fungi 171
A. Araujo and O.P. Ward (Canada)

Effect of controlled substrate feeding on butyric acid production by *Clostridium tyrobutyricum* 179
F. Fayolle, R. Marchal and D. Ballerini (France)

Hydration of 3-cyanopyridine to nicotinamide by crude extract nitrile hydratase 185
J. Eyal and M. Charles (U.S.A.)

Identification of fungi for sweet whey permeate utilization and eicosapentaenoic acid production 191
E.W. Wessinger, D.J. O'Brien and M.J. Kurantz (U.S.A.)

Effects of mutations altering SOS regulation on a nalidixic acid-inducible system for the production of heterologous proteins in *Escherichia coli* 199
J. Keller, R. Gerber, B.J. Del Tito, Jr., D. Vannicolo and E.J. Arcuri (U.S.A.)

Enzymatic digestion of spent yeast cells for nutrient recycling in inulase production 207
K. Sing Lam and J.W.D. GrootWassink (U.S.A., Canada)

Biochemical changes in fermented melon (egusi) seeds (*Citrullis vulgaris*) 211
A.M. Abaelu, D.K. Olukoya, V.I. Okochi and E.O. Akinrimisi (Nigeria)

Improvement of glidobactin A production by *Polyangium brachysporum* 215
J.A. Titus and C.A. Roundy (U.S.A.)

Glyphosate degradation by *Agrobacterium radiobacter* isolated from activated sludge 219
K.S. McAuliffe, L.E. Hallas and C.F. Kulpa (U.S.A.)

Antimicrobial activities of some *N*-alkylmaleimides 223
Y. Igarashi, K. Yagami, R. Imai and S. Watanabe (Japan)

No. 4

Original Papers

Utilization of cathodically produced hydrogen from mild steel by *Desulfovibrio* species with different types of hydrogenases 227
M. H. Czechowski, C. Chatelus, G. Fauque, M. F. Libert-Coquempot, P. A. Lespinat, Y. Berlier and J. LeGall (France, U.S.A.)

Biodegradation of diphenyl ethers by a copper-resistant mutant of *Erwinia* sp. 235
H. J. Liaw and V. R. Srinivasan (U.S.A.)

Isolation and characterization of a surfactant produced by *Bacillus licheniformis* 86 243
S. Horowitz, J. N. Gilbert and W. M. Griffin (U.S.A.)

Bioaccumulation of metals by Coryneform SL-1 249
R. W. Traxler and E. M. Wood (U.S.A.)

Recycle of cellulases and the use of lignocellulosic residue for enzyme production after hydrolysis of steam-pretreated aspenwood 253
C. M. Hogan and M. Mes-Hartree (Canada)

Bifidobacteria and their role in human health 263
T. Mitsuoka (Japan)

Purification and some properties of the mannanases from *Thielavia terrestris* **269**
A. Araujo and O. P. Ward (Canada)
Degradation of 2,4-dichlorophenoxyacetic acid by mixed cultures of bacteria **275**
K.-H. Oh and O. H. Tuovinen (U.S.A.)
Bioconversion of avermectin into 27-OH avermectin **279**
M. Chartrain, R. White, R. Goegelman, K. Gbewonyo and R. Greasham (U.S.A.)
DNA sequence analysis of endoglucanase genes from *Pseudomonas fluorescens* subsp. *cellulosa* and *Pseudomonas* sp. NCIB 8634 **285**
B. R. Wolff, B. R. Glick and J. J. Pasternak (Canada)
Identification of indolepyruvic acid as an intermediate of rebeccamycin biosynthesis **291**
Kin Sing Lam, S. Forenza, T. W. Doyle and C. J. Pearce (U.S.A.)
Purification of macrolide 2′-phosphotransferase from *Streptomyces coelicolor* Müller **295**
V. P. Marshall, J. H. Coats, L. Baczynskyj, J. I. Cialdella, W. F. Liggett and J. E. McGee (U.S.A.)
Author Index **299**
Subject Index **302**